

MEMORANDUM ON THE 1939 BLACK HILLS BEETLE SURVEY

POWELL NATIONAL FOREST

The period from September 11 to September 16 was spent on the Powell National Forest, Utah, training spotters preliminary to an extensive 5 percent survey of the East Fork Drainage and getting this survey under way. The object of this survey was to locate the areas that had sufficient infestation to warrant control and to secure a fairly accurate figure of the total number of infested trees on these areas.

Two infestation units and a part of a third had been covered by a 5 percent cruise at the time of leaving. The data on these units are tabulated below:

| Unit No. | Area | Approximate Size | Approximate number of in- fested trees per acre | Number of sorrel tops per acre | Estimated number of new attacks |
|----------|-------------------------------|---------------------|--|---|---------------------------------------|
| 1 | Dave Hollow-Alstrom Hollow | 21,800 | .08 | .06 | 1000-1500 |
| 2 | Bluefly-Badger | 12,260 | .49 | .19 | 5000-6000 |
| 3 | Skunk-Blubber | Not yet done | | | |
| 4 | Upper Kanab (partly done) | 9,600 | .12 | .10 | 1000-1500 |

The accompanying map shows the location of these units.

The remainder of the East Fork will probably have to be divided into a few more units depending on the type (density) of the infestation and until the figures are in for these units no estimate of the total number

of trees that should be treated can be made. This survey, which was being conducted by a 5-man crew, should have been completed by September 23. The above table shows, however, that a very heavy infestation is present in the Bluefly-Badger unit, and although this area is rather hard to get into, the infestation threatens the more accessible areas and those treated the previous years.

Red tops are scattered throughout the upper Kanab unit and appear almost as numerous as those in Bluefly but the preliminary cruising that was done in the former unit indicates that the infestation per acre of new attacks is not as heavy as in the Bluefly Unit. The complete cruise of the Upper Kanab Unit may show, however, that the tentative figures for the new attacks have been placed too low.

Many ponderosa pine were found blown down by the windstorm of last June, especially at the head of Clay Creek, where, in a small area, about 50 percent were down. All the trees observed were heavily hit by the Black Hills beetle and care should be taken to treat these trees as though they were standing infested trees.

The infestation in general appears to be rather aggressive as the attacks extend from the stump to well up the bole and infested trees often occur in groups of 30 or more.

It is recommended that a complete clean-up be made of the infestation.

Fort Collins, Colorado,
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CC: Dr. Craighead (2)
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Respectfully submitted,

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